Credit conditions, macroprudential policy and house prices

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Discussion by Valerie De Bruyckere (EBA)

This paper …

- Simulates the impact of macroprudential policy on house prices in Ireland

- Uses loan level data on Irish mortgages originated between 2003-2010

- Finds that in Ireland between 2003 and 2010, the majority of borrowers had their credit determined by the prevailing LTI ratio

- Finds that a one euro increase in credit supply leads to a 0.22 euro increase in the value of the house purchased

- Finds that restrictions on LTV, LTI and DSR would have reduced average house prices in Ireland between 20% - 39%
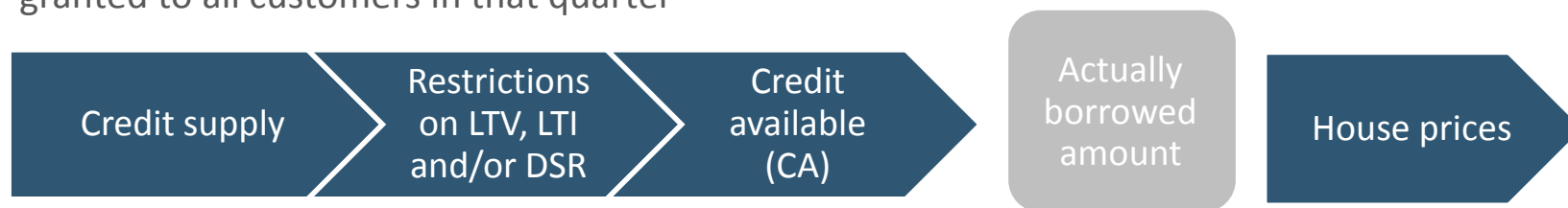
Approach used in this paper

- Loan level data
  - ➢ 2/3 of Irish mortgage market
  - ➢ 4 lenders
  - ➢ 189 472 property purchases
  - ➢ Period 2003-2010

- For every borrower: borrowed amount, mortgage balance, bank, current interest rate, interest type, origination date, maturity date, current loan-to-value (LTV), first time buyer, marital status, geographic location, employment, income, …
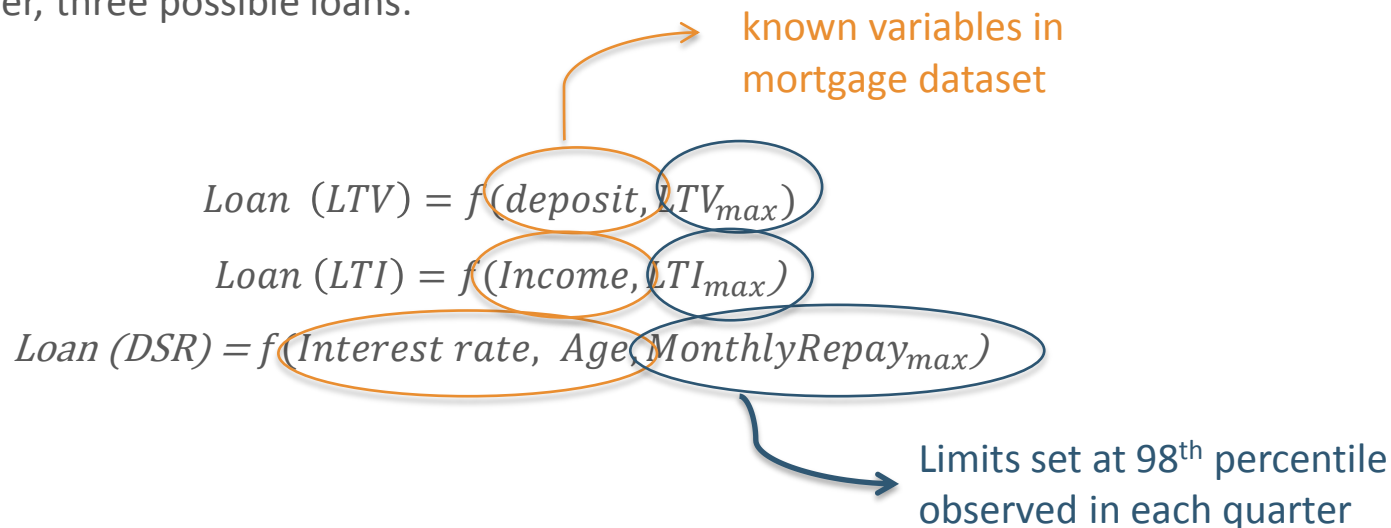
- At loan-level, i.e. for every borrower: **a measure for available credit (CA)** is constructed

- The supply of credit is restricted to each borrower at the 98th percentile of LTI, LTV and DSR granted to all customers in that quarter

| Credit supply | Restrictions on LTV, LTI and/or DSR | Credit available (CA) | Actually borrowed amount | House prices |

Approach used in this paper

- For every borrower, three possible loans:

known variables in mortgage dataset

$$Loan\ (LTV) = f(deposit, LTV_{max})$$

$$Loan\ (LTI) = f(Income, LTI_{max})$$

$$Loan\ (DSR) = f(Interest\ rate,\ Age, MonthlyRepay_{max})$$

Limits set at 98th percentile observed in each quarter

- Credit available (CA) = minimum of $Loan\ (LTV)$, $Loan\ (LTI)$ and Loan (DSR)

- On the question: what determines credit availability (CA)? For each borrower, it is verified which loan (LTV, LTI or DSR) is smallest. Think of CA as "tightness of credit conditions" at borrower level.

- What is the role of the actual borrowed amount in this study? "Actual borrowed amounts are often far below CA"

Approach used in this paper

$$Loan\ (LTV) = f(deposit, LTV_{max})$$

$$Loan\ (LTI) = f(Income, LTI_{max})$$

$$Loan\ (DSR) = f(I,\ Age, MonthlyRepay_{max})$$

$$CA_{it} = \min(Loan\ (LTV), Loan\ (LTI), Loan\ (DSR))$$

$$HP_{it} = f(CA_{it}, Income_{it}, Wealth_{it}, Bank_{it}, PropertyType_{it}, C_t, \dots)$$

Comment 1/3

- The effect of "a set of macroprudential policies similar to those introduced in Ireland in 2015" is assessed

- Scenario in this paper seems to be different from the current mortgage policy in Ireland (notified to EBA, implemented since 2007)

- Higher risk weights are set for exposures fully and completely secured by residential and commercial immovable property (Article 124 CRR):

  - Stricter criteria for the eligibility for the 35% risk weight for residential properties
    - The property is owner-occupied
    - The LTV does not exceed 75%
    - If these criteria are not met: 100% risk weight instead of 35% risk weight
  - Higher risk weight for commercial immovable properties: 100% instead of 50%

- Changes to risk weights and LGD floors published on EBA website:

https://www.eba.europa.eu/supervisory-convergence/supervisory-disclosure/rules-and-guidance

	A	B	C	D	E
1	**Changes to risk weights or stricter criteria for exposures fully and completely secured by mortgages**				
2	**Member State**	**National Competent Authority**	**Change in RW**	**Stricter criteria**	**Type of immovable property**
3	Date of the last update of information in this Annex: 10/06/2015				
4					
5	Croatia	Croatian National Bank	Not applicable	- The definition of residential property, for the purpose of Article 125, is a house, a flat or associated parts of the flat in flat ownership intended to be used and a dwelling or a building plot intended to be used for construction of a house. A garage or a parking spot shall be considered residential real estate property if the mortgage on or fiduciary transfer of ownership of a garage or a parking spot is connected with the mortgage on or fiduciary transfer of ownership of a house, flat or associated parts of the flat in flat. Holiday homes shall not be considered residential real estate property. - The exposures, or part of an exposure, are secured by residential property which is or shall be occupied by the natural person who is the owner or which the natural person who is the owner of the property lets for residential purposes under a lease contract . - The owner of the residential property is the owner of not more than two residential properties.	Residential property
6	Ireland	Central Bank of Ireland	Not applicable	- The property is owner occupied. - The loan-to-value ratio does not exceed 75%.	Residential property
7	Ireland	Central Bank of Ireland	From 50% to 100%	Not applicable	Commercial property
8	Malta	Malta Financial Services Authority	Not applicable	Stricter criteria applied to Article 125(2)(d) CRR: The part of the loan to which the 35% risk weight is assigned shall not exceed 70% of the market value of the property in question.	Residential property

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Comment 1/3

- Limits on LTI, LTV, DSR versus thresholds on these variables to determine the applicable risk weight:

  ➢ Current policy in Ireland: threshold on LTV determines applicable risk weight (35% versus 100%)

  ➢ This paper: limits on LTI, LTV and DSR

- Consultation end 2014 (CP87, Macro-prudential policy for mortgage lending) (+ Feedback Statement on CP87 in 2015):

  *The proposed measures will require banks to restrict lending for primary dwelling purchase **above 80 per cent LTV to no more than 15 per cent of the aggregate value** of the flow of all housing loans for principal dwelling home purposes; and to restrict lending for primary dwelling purchase **above 3.5 times LTI to no more than 20 per cent of that aggregate value**.*

- Earlier mortgage restrictions in Ireland?

  Was a 100% cap on LTV policy in place in Ireland?
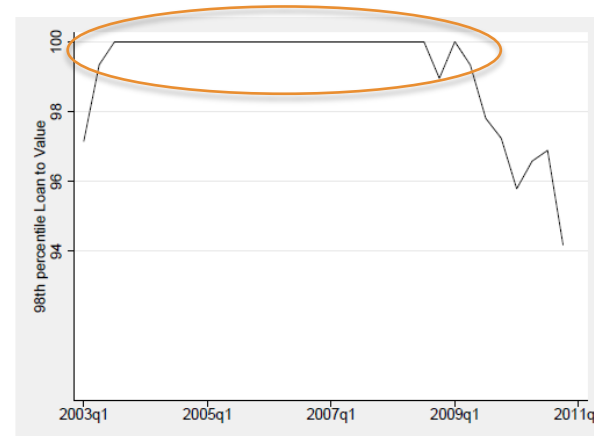
Comment 2/3

- This paper assesses the effect of one specific type of macroprudential tool, i.e. setting limits on LTI, LTV and/or DSR

- It would be interesting to show that the chosen policy (i.e. the chosen level of LTV, LTI, DSR) in Ireland is the most effective and most accurate.

- What would have been the effect of other alternative policy options? It would be interesting to compare the effect of the chosen policy with alternative macroprudential tools

- EU wide versus Irish perspective on macroprudential policy for mortgage market
  - International banking groups with cross-border exposures (reciprocity and level playing field)
  - EBA work on this topic:
    - EBA Opinion on Macroprudential rules in CRR/CRD (June 2014)
    - EBA Report on the range of practices regarding macroprudential policy measures (July 2015)

Comment 2/3

➤ EBA Report on the range of practices regarding macroprudential policy measures communicated to EBA (July 2015): Table 6 in Annex

Instrument	Member States	Measure
Article 458(2) CRR	BE (reciprocated by NL)	5% add-on to risk weight for residential mortgages of IRB banks
Article 124(2) CRR	HR, NO, IE, RO, MT, UK	Higher risk weights or stricter criteria for residential or commercial immovable property
Article 164(5) CRR	NO	Higher minimum LGD values for retail exposures secured by residential immovable property in Norway (from 10% to 20%)
Pillar 2	SE (reciprocated by DK), UK	Risk weight floor on mortgages of 25% for IRB banks (SE), limitation of the quarterly flow of first charge mortgage lending at or above 4.5 times salary to 15% of such lending (UK)

Comments 3/3

- What is the reason for excluding the following high-risk segments from the sample?
  - Why are only owner-occupied mortgages (primary dwellings) considered?
  - Why are Buy-to-Let mortgages (BTL) excluded from the data set?
  - Why are loans for refinancing excluded from the data set?

- The house price regression model controls for income and wealth of the borrowers, but these variables are also captured in Credit Available (CA):

$$HP_{it} = f(CA, \textbf{\textit{Income}}, \textbf{\textit{Wealth}}, Bank, PropertyType, C_t, \dots)$$
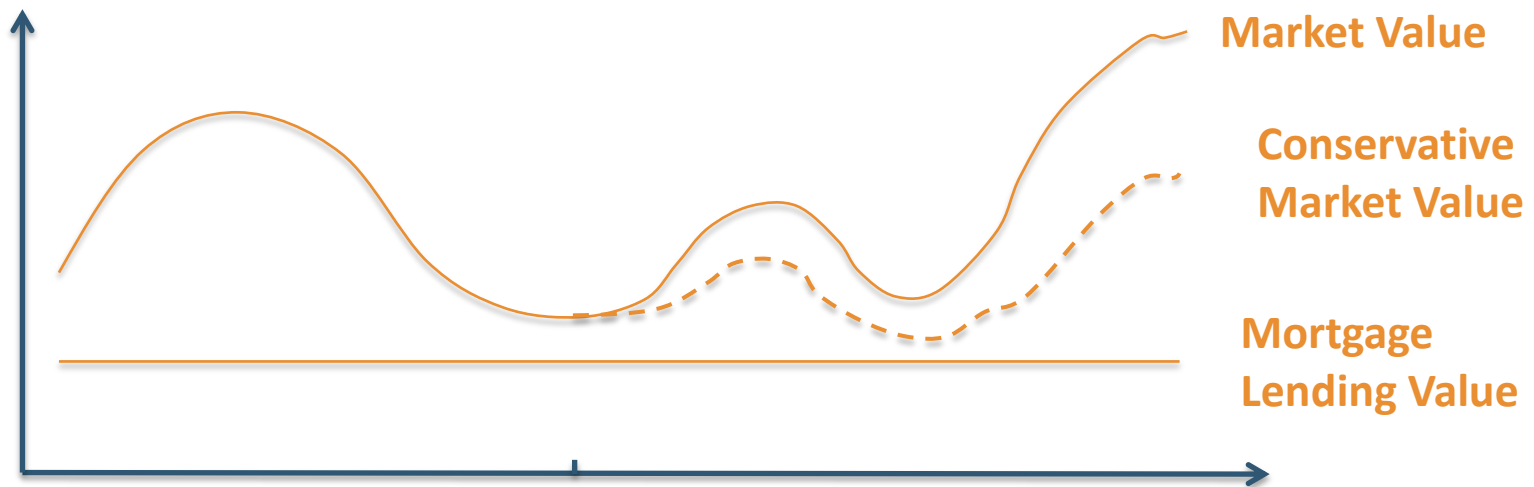
and

$$Loan\ (LTV) = f(\textbf{\textit{deposit}}, LTV_{max})$$

$$Loan\ (LTI) = f(\textbf{\textit{Income}}, LTI_{max})$$

- What is the share of variable-rate mortgages and fixed-rate mortgages in Ireland? Does the sample only include variable rate mortgages?

Other comments 3/3

- Which valuation metric is used in this study? MV, MLV, conservative MV?

Market Value

Conservative Market Value

Mortgage Lending Value

- If market value or conservative market value is used as valuation metric, then automatically a decline in property prices will lead to higher capital requirements (through the LTV limit, Article 125-126 CRR)

Research suggestions

- Why not model the house prices directly as a function of LTV, LTI and DSR? Why is the two-step approach necessary?

- Link this database to bank-specific data of these four lenders: bank balance sheet data & income statement

- What is the role of the banking sector in this study? How is loan supply linked with indicators of bank strength, riskiness and business model indicators?